

REMARKS

Reconsideration of this application is respectfully requested. claims 1, 2, 5-10, 13-61, 63, 65, and 66 are pending. Claims 3, 4, 11, 12, 62, and 64 have been cancelled. All of the pending claims stand rejected.

REJECTIONS UNDER 35 U.S.C. § 103(a)

All pending claims stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Brinegar, *et al.* (WO00/14081) in view of Feldmann, *et al.* (U.S. Pat. No. 4,564,692). Applicants respectfully disagree. The cited references fail to teach or suggest all of the limitations of the claimed invention.

In *Graham v. John Deere*, 383 U.S. 1, 17-148 (1966) the U.S. Supreme Court established a four factor inquiry necessary to establish a *prima facie* case of obviousness, which was reaffirmed in *KSR International Co. v Teleflex Inc.*, 550 U.S. \_\_\_\_ (2007). The four factors are (a) determining the scope and contents of the prior art; (b) ascertaining the differences between the prior art and the claims in issue; (c) resolving the level of ordinary skill in the pertinent art; and (d) evaluating evidence of secondary indicia of non-obviousness such as meeting a long felt need, succeeding where others have failed, success in the market, etc. Applicants respectfully submit that the cited art is insufficient to establish a *prima facie* case of obviousness, because *the cited art does not teach production of anhydrosugar alcohol in the absence of a solvent.*

The claims of the instant application require dehydration without a solvent. Brinegar expressly teaches that a solvent is necessary during dehydration. As noted in the Official Action, Brinegar reports the production of an anhydrosugar alcohol through the steps of "dehydrating the sugar alcohol or monoanhydrosugar alcohol *in the presence of an acid catalyst and a solvent* to form a reaction product which is at least partly soluble in the solvent; removing water from the reaction vessel; removing solvent comprising the dissolved reaction product from the reaction vessel; separating reaction product from the removed solvent; and recycling the solvent into the reaction vessel." Brinegar goes on to state that a subsequent purification step is optional.

Feldmann addresses only purification of anhydrosugar alcohols. Feldmann does not report production of anhydrosugar alcohols aside from a perfunctory statement in the final paragraph of column 4. Feldmann does not suggest production *or* purification of anhydrosugar alcohols in the absence of a solvent.

Even if there were some motivation to combine Feldmann and Brinegar (which applicants do not admit), such a combination would lead only to production of an anhydrosugar alcohol according to the method reported by Brinegar (which necessarily includes use of an organic solvent) followed by purification of that anhydrosugar alcohol by the method reported by Feldmann. That is, Feldmann would represent the subsequent, optional purification step in Brinegar. There is absolutely nothing in Feldmann or Brinegar to suggest that the steps of a process used to purify an anhydrosugar alcohol after it has been produced would be at all applicable to or helpful in a process to actually produce an anhydrosugar alcohol. Production and purification are not interchangeable.

Neither Feldmann nor Brinegar teaches production of an anhydrosugar alcohol without a solvent. Even if the references were combined, they would only result in Brinegar's production method followed by Feldmann's purification method; again, this does not teach the solvent-free production method of the claims of the instant application.

Applicants therefore respectfully submit that the Examiner has not made a *prima facie* case of obviousness. The cited references, alone or in combination, do not teach all of the limitations of the claims. Applicants respectfully request that the rejection under Section 103 be withdrawn and the claims allowed.

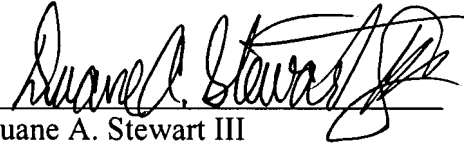
#### CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and as such, the Application is in condition for allowance. If the Examiner believes that personal communication would expedite

prosecution of this Application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,

Dated: September 21, 2007

A handwritten signature in black ink, appearing to read "Duane A. Stewart III", written over a horizontal line.

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